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## United States Senate

COMMITTEE ON COMMERCE, SCIENCE,  
AND TRANSPORTATION  
WASHINGTON, D.C. 20510

April 13, 1982

The Honorable Mark Fowler  
Chairman, Federal Communications  
Commission  
1919 M Street, N.W.  
Washington, DC 20554

Dear Mr. Chairman:

In early 1978, the FCC began a general inquiry into the matter of telecommunications services for the deaf and hearing impaired (Common Carrier Docket No. 78-50). In the "Notice of Inquiry" which instituted that proceeding, the FCC requested respondents to address the following question: "Whether it is necessary for the benefit of hearing aid users for the Commission to establish standards, such as electromagnetic leakage, etc., in the manufacturing of telephone handsets?" Comments were requested by May 1, 1978 and reply comments were requested by June 15, 1978.

The overall investigation undertaken in Docket 78-50 considered teletypewriter systems, tariff structures, and a variety of other issues far larger and more complex than the question dealing with hearing aids. That question was, however, one of several on which the Commission specifically requested comments. We have been advised by the Commission's staff that, because of intervening events such as the Computer II decision, issuance of a report has been delayed and that the staff is still engaged in the drafting of a report.

On May 6, 1982, the Senate Committee on Commerce, Science, and Transportation has scheduled hearings on the issue of telephone compatibility for the hearing impaired. It would be most helpful if we could have the results of your inquiry into this very narrow aspect of Docket 78-50 available to us before those hearings. Accordingly, we would appreciate your staff reviewing the Docket and informing us of the comments received on this question and of the Commission's tentative conclusions on this issue. We would like to have your response in hand no later than April 29, 1982.

Sincerely yours,

*Howard W. Cannon*  
HOWARD W. CANNON

HWC: pwv

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UNITED STATES GOVERNMENT  
memorandum

DATE: April 15, 1982

REPLY TO: Gary M. Epstein, Chief  
ATTN OF: Common Carrier Bureau

SUBJECT: Comments on S.604 and S.2355

TO: Jackson F. Lee  
Director of Legislative Affairs

S.604 and S.2355 both seek to facilitate telephone use by the hearing impaired. S.604, introduced by Senator Mathias, makes mandatory the design and manufacture of all telephone receivers used in interstate or foreign communication to permit telephone reception by means of any hearing aid which uses an induction coil or any other inductive receptor. Effective one year after the date of enactment of the act, any person who distributes receivers not in compliance with the requirements set forth must be fined \$5,000 for a first offense and \$10,000 for any subsequent offense.

S.2355, introduced by Senators Cannon, Goldwater and Riegle, is designed to be less specific than S.604. As Senator Cannon observed while introducing his bill, some fear that because S.604 is tied to a specific technology, its enactment would impede new technical developments. S.2355, in contrast, is not closely tied with any specific technology, but does seek to facilitate use of the telephone by the hearing impaired.

S.2355 has six provisions. First, it directs the FCC to ensure reasonable access to telephone service by persons with hearing impairments. Second, it directs the FCC to require the use of magnetic field/induction coils on coin operated pay phones. Third, it permits the FCC to require that similar phones be installed in hospital rooms or in other locations frequently used by members of the public. Additionally, it permits the FCC to impose technical standards for hearing aids and telephones and to require consumer information labeling on hearing aids and telephones at the time of sale. Finally, it directs the FCC to consider the costs and benefits to both hearing impaired and non-hearing impaired persons in any rulemaking and to ensure that its rules do not block the development of new technology.

Before analyzing these bills, discussion of efforts already underway at the Commission, by telephone companies themselves and at the state level would provide useful background. Both S.604 and S.2355 are directed solely to the telephone needs of the hearing impaired. On February 8, 1978 the FCC adopted CC Docket No. 78-50 which is an inquiry into the

telecommunications needs of the hearing impaired, as well as the deaf. In this docket the Commission intended to offer a forum in which communications common carriers and other communications equipment vendors could come to better understand the communications needs of the hearing impaired and the deaf community. Second, the Commission sought to generate a comprehensive record to assist in formulating any possible policies or rules governing telecommunications service for the deaf and hearing impaired.

There have been significant developments in telecommunications services for the deaf and hearing impaired since the Commission instituted CC Docket No. 78-50. On August 20, 1981, the Common Carrier Bureau granted AT&T special permission to revise its tariff on normal statutory notice, without supporting cost data, to provide reduced rates for hearing or speech impaired customers on interstate station-to-station calls which do not require intervention of an operator. In this tariff revision AT&T proposes that calls for which day rates are normally charged be priced at the evening rate and that calls for which evening rates are normally charged be priced at the night rate.

This rate reduction, according to AT&T, is a way to mitigate the higher expense of toll network use incurred by deaf customers. These customers, who communicate by teletypewriter (TTY), must maintain the toll system connection between two TTYS while typing messages. Ordinarily, the message can be conveyed orally faster than it can be typed. Therefore, the time taken, and hence the toll charge, is greater for the same message when conveyed via TTY when the same rates are applied to both communications. The AT&T proposed rate reductions for deaf and hearing impaired customers alleviates this cost burden.

In another step toward better serving the hearing impaired, the Commission released its Report and Order in PR Docket 79-315 on February 26, 1981. Here the Commission amended its rules to provide two frequencies for paging and response for the hearing impaired, blind and physically disabled.

Telephone companies themselves have also taken steps to improve service for the deaf and hearing impaired since the Commission released its notice in CC Docket No. 78-50. For example, the Commission has been informed that AT&T, GTE and Continental are all in the process of making pay telephones compatible with hearing aids. In its supplemental comments filed before the Commission in May 1980, AT&T stated that it would be providing operator assistance to deaf TTY users in mid-1980 at regional centers accessible twenty-four hours per day. According to AT&T, the consumer assistance offices will also provide directory assistance for the deaf.

The Commission is also aware of developments on the state level which improve telecommunications services for deaf and hearing impaired customers. We understand that nearly half the states have reduced intra-state toll rates for these customers. The California legislature amended the Public Utilities Code to require every telephone company to provide -- without any surcharge -- a telecommunications device capable of serving the

needs of the deaf or severely hearing impaired to those who need it. The Michigan Public Service Commission recently required all telephone companies subject to its jurisdiction to provide TTYs for the deaf and hearing impaired at actual purchase cost.

The Common Carrier Bureau is in the process of assessing the record in CC Docket No. 78-50 in light of these developments and of its decision in the Second Computer Inquiry. In that decision the Commission decided that customer premises equipment charges will not be subject to regulation by this Commission after an appropriate transition period. The Common Carrier Bureau plans to bring issues raised in CC Docket No. 78-50 and subsequent developments to the Commission for its consideration soon.

S.604 requires all receivers to be compatible with hearing aids using inductive coupling to improve reception from the telephone. Comments in our CC Docket No. 78-50 indicate that about half the hearing aids in use in the United States, some 1 to 2 million, have this feature. These hearing aids pick up electromagnetic leakage from a telephone receiver with their inductive coupling. Most Western Electric telephones currently in use contain the U-type receiver, which provides sufficient electro-magnetic leakage to permit such hearing aids to operate. ITT and Stromberg-Carlson have also manufactured telephones with similar design in the past. However, most telephone receivers which are currently being manufactured, including Western Electric's L-type receiver, do not provide sufficient magnetic leakage to enable a hearing aid user to benefit from the inductive coupling feature.

S.604 is overly broad. All telephone customers should not be foreclosed from choosing the type of receiver which they want, particularly since modification of L-shaped receivers with external adaptors or magnetic coils to provide for hearing aid compatibility will impose extra costs. Additionally, adoption of a magnetic leakage requirement could inhibit development of telephone technology.

The approach taken by S.2355 is preferable. To the extent that it is within the FCC's power, it can ensure reasonable access to telephone service by persons with hearing impairments. Our information is that most coin operated pay phones are already equipped with magnetic field/induction coils which make them usable with many hearing aids. Certainly it is a wise policy approach for the FCC to ensure that its rulemakings in this area not block the development of new technology and to assess the impact of proposals on the hearing impaired as well as society as a whole.

It would be useful for hearing aid-compatible telephones to be installed in public places. It would also be beneficial for hearing aids and telephones to be labeled to indicate whether they are usable with hearing aids. This would allow the hearing impaired, as well as the many other people who wish to communicate with them, to make informed choices of telephones. The FCC is not in a good position to enforce these provisions, however, since effective January 1, 1983 it will have deregulated all new terminal equipment under its decision in the Second Computer Inquiry.

Finally, the FCC will not be in a position to impose technical standards for telephones after the Second Computer Inquiry deregulation date. In any event, the FCC has never before become involved in such standard setting. Its role has been limited to ensuring that equipment interconnected with the network not do harm to the network. Its technical standards for telephones, set forth in Part 68 of its Rules, are narrowly directed to this end.

G.M.E.